Wisconsin
Department of Commerce

Approval # 20020003

Environmental & Regulatory Services Division
Bureau of Petroleum Products and Tanks
201 West Washington Avenue
P.O. Box 7837
Madison, WI 53707-7837

Wisconsin COMM 10 Material Approval

Equipment: Secondary Containment Aboveground Tanks and Generator Base Tanks (UL 142, UL 2085)

Manufacturer: IBI, LLC
P.O. Box 1243
Caldwell, ID 83606

Expiration of Approval: December 31, 2007

SCOPE OF EVALUATION

The IBI secondary containment aboveground tank for flammable liquids, with or without integrally welded supports, and the secondarily contained generator base tanks, were evaluated in accordance with **ss. COMM 10.345 (1)** and **10.415 (7)(b)** of the Wisconsin Administrative Flammable and Combustible Liquids Code. This approval includes tanks displaying the UL 142 label, and the UL 2085 label. This Material Approval does not address tanks mounted on trailers for temporary or portable use.

This approval has been based upon Commerce evaluation of information submitted by the manufacture, the Steel Tank Institute and third party evaluation. Specific tank or manufacturer design data is considered confidential. Specific technical information relating to evaluating or qualifying the technical and engineering information submitted should be made to the manufacturer or submitter.

This evaluation summary is condensed to provide the specific installation, application and operation parameters necessary to maintain the subject systems in compliance with the Wisconsin Administrative Code – Comm 10.

DESCRIPTION AND USE

These tanks are listed (UL 142, UL 2085) tanks for the aboveground storage of flammable or combustible liquids. IBI manufactures tanks in horizontal, vertical, cylindrical, and rectangular configurations according to the **UL 142** and **UL 2085** Standards.

The **UL 2085** tank is a thermally insulated double-wall storage tank. The interstitial space between the two steel walls is filled with a lightweight concrete and insulation mixture in thickness of 6 inches to provide the thermal resistance that limits the average temperature within the tank during a two hour 2,000 degree Fahrenheit test to 260 degrees. Tanks displaying the UL 2085 label will provide a fire protection rating that is significantly less likely to exhibit a release or exhibit damage in a fire.

TESTS AND RESULTS

For all designs, the inner tank and secondary containment have been tested and listed by UL in accordance with UL Standard 142. The support design has also been approved by UL.

Tanks designed to the UL 2085 standard have been tested and recognized as qualifying under the UL 2085 test procedure. Per NFPA 30 (2000 edition) -1.6.43.6 Protected Aboveground Tank is defined as a aboveground storage tank that is listed in accordance with UL 2085, Standard for Insulated Aboveground Tanks for Flammable and Combustible Liquids, or an equivalent test procedure that consists of a primary tank provided with protection from physical damage and fire-resistive protection from exposure to a high-intensity liquid pool fire.

Additional qualification for Vehicle Impact Resistance and Projectile Resistance was performed and approved under the UL 2085 standard.

LIMITATIONS / CONDITIONS OF APPROVAL

- The double wall tanks are approved for compliance with the secondary containment requirements of **ss. COMM 10.345 (1)** and **10.415 (7)(b)** and may be used without a dike, except in the case of public-access waste oil collection. Tanks for public-access waste oil collection shall be provided with a dike in accordance with **s. COMM 10.33**.

- Tank and engine units are to be installed in accordance with Comm 10 – Wisconsin Flammable and Combustible Liquid Code, **NFPA 30** – Flammable and Combustible Liquids Code, **NFPA 37** – Installation and Use of Stationary Combustion Engine and Gas Turbines, and **NFPA 110** – Standard for Emergency and Standby Power Systems.

- Tanks up to 12,000 gallons displaying the UL 2085 label may be used for vehicle fueling in accordance with **s. COMM 10.415**. All other tanks under this Material Approval used for the purpose of vehicle fueling are restricted to 10,000-gallon capacity.

- UL 2085 tanks meet the requirements for a 2-hour fire exposure and may be sited using the reduced setbacks under **s. COMM 10.415 (4) (b)2**.

- All tanks will display the **UL 142** label. A **UL 2085** tank shall be marked with the "**UL 2085 Protected Tank**" label. **UL 2085** tanks with the Vehicle Impact Resistance and Projectile Resistance qualification shall be marked "**Vehicle Impact Resistant**" and "**Projectile Resistant**" in addition to the "**UL 2085 Protected Tank**" label.

- The interstitial space shall be monitored for leaks. The monitor must be capable of detecting a leak from anywhere in the inner tank.

- Compartmentalized tanks shall be constructed for a double bulkhead in accordance with UL Standard 142. This interstitial space between compartments shall be monitored for leaks.

- A spill container shall be provided at the fill opening in accordance with **s. COMM 10.415 (12)(a)**.

- No attachments shall be made to the tank that will violate or void the UL Listing.

- The tank shall be installed to allow full visual inspection of the secondary containment system. Tank foundations shall be designed to minimize the possibility of uneven settling of the tank and to minimize corrosion in any part of the tank resting on the foundation. Tank supports must be placed on a prepared flat smooth solid surface. For horizontal, cylindrical tanks with steel tank supports, the bottom of tank shell shall be a minimum of 3-in. to a maximum of 12-in. above grade as measured at lowest point of steel saddle. Single wood timber supports (not cribbing), laid horizontally, shall be permitted to be used for outside aboveground tanks if not more than 12-inches high at their lowest point. All other types of supports must raise the tank off the foundation 3-inches minimum.

- The tank system operator is required to maintain the system components according to the respective manufacturer's guidelines.

- An aboveground storage tank installer certified by the department in accordance with **Comm 5.84** shall supervise the installation. A leak test shall be performed on-site by the installer prior to installation approval.

This approval will be valid through December 31, 2007, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Material Approval Number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The Department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement unless specified in this document.

Reviewed by: _____

Greg Bareta, P. E.
Engineering Consultant
Bureau of Petroleum Products and Tanks

Approved by: _____ Date: _____